Application No.: 10/805,772 Amendment dated: April 7, 2005

Reply to Office Action of: February 8, 2005

REMARKS

Rejections Under 35 USC § 102 and 103

The Examiner continues to reject claims 12, 13, 15 and 17 under 35 U.S.C., Section 102 as anticipated by Bahar and claim 16 under 35 U.S.C., Section 103 as unpatentable over Bahar in view of Queen. Claims 12 and 17 are independent claims.

A. Definition

With respect to language "straight edge" found in claims 1, 15 and 17, the Examiner argues that:

.... the definition for 'straightedge' (note this is one word) is as the applicant defines from Webster's Encyclopedia Unabridged Diction of the English language, 1989 edition, 'a bar or strip of wood or metal... for use in drawing or testing straight lines, planes, etc.'. The applicant's claims and specification support the words 'straight edge', note this is a combination of two separate words, thus the definition of the one word 'straightedge' does not apply.

Webster's Encyclopedic Unabridged Dictionary of the English Language, 1989 Edition, defines the following:

"edge" - "any of the narrow surface of a thin flat object."

"straight" - "without a bend or curve"

"straightedge" – "a bar or strip of wood or metal for use in testing straight lines, planes, etc.

"machinist" - "one who operates machinery, esp. a highly trained, skilled operator of machine tools"

Queen, cited by the Examiner, distinguishes machinists' tools as being tools of "extreme precision" (Col.1, ln. 23-25).

From the definitions, it is clear that:

"straight edge" = "narrow surface of a thin, flat unbent/uncurved object"

A "straightedge," that is the tool called a "straightedge," is a bar or strip of wood or metal

for use in testing straight lines, planes, etc. It is such because it combines the above defined

properties of being "straight" and an "edge." In fact, Webster also notes that "straightedge" =

[STRAIGHT + EDGE]. A machinist's "straight edge" is an "extremely precise" straight edge

used to test surfaces.

The Examiner argues that "Even if the applicant were to change the claim language and

the specification to state the one word "straightedge", the references and current rejection would

still apply."

However, regardless of whether the language uses "straight edge" or "straightedge," the

result should be the same and the claims should be allowed. Applicant's invention is understood

from the language of the claims and it is distinguished over Bahar or Bahar in view of Queen.

B. The Preamble

The Examiner argues under Kropa v. Robie, 88 USPQ 478 (CCPA 1951) that the

preamble of the claim is not to be given patentable weight because "a preamble is denied the

effect of a limitation where the claim is drawn to a structure and the portion of the claim

following the preamble is a self-contained description of the structure not depending for

completeness upon the introductory clause."

This position is improperly applied to applicant's preamble.

Determination of whether a preamble limits a claim is made on a case-by-case basis in

light of the facts in each case; there is no litmus test defining when a preamble limits the scope

of a claim. Catalina Mktg. Int'l v. Coolsavings. com, Inc. 289 F.3d 801, 808, 62 USPQ 2d 1781,

1785 (Fed.Cir.2002). If the claim preamble, when read of the context of the entire claim, recites

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limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality'

to the claim, then the claim preamble should be construed as if in the balance of the claim."

Pitney Bowes, Inc. v. Hewlett Packard Company, 182 F.3d 1298, 1305, 51 USPO 2d 1161, 1165-

66 (Fed.Cir.1999). Determination of whether preamble recitations are structural limitations can

be resolved only on review of the entirety of the application "to gain an understanding of what

the inventors actually invented and intended to encompass by the claim." (Pac-Tec, Inc. v.

Amerace Corp. 903 F.2d 796, 801, 14 USPQ2d 1871, 1876 (Fed.Cir.1990). The statements in the

preamble reciting the purpose or intended use of the claimed invention must be evaluated to

determine whether the recited purpose or intended use results in a structural difference between

the claimed invention and the prior art. If so, the recitation serves to limit the claim. See e.g., In

re Otto 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963).

The pertinent definitions related to the preamble and the body of applicant's claims have

been stated above. In the context of the entire claim, applicant's preamble gives life, meaning

and vitality to the structure. Taken together, they give a full understanding of what was invented

and encompassed by the claims. To the extent that the content of the preamble is considered to

be a statement of purpose or intended use, it also results in structural differences from the cited

art, as is more fully hereinafter explained in relation to the Examiner's comments on "intended

use" and "whereby" clauses.

Applicant's preamble establishes that the claim is defining a tool for use by a machinist

and more particularly a machinist's tool which is useful in testing the accuracy of a workpiece

or, as amended, in "identifying flaws in the flatness of the surface of the workpiece." The

implication of the claimed invention as being a tool for use by a machinist is significant in

understanding the claimed invention. For example, and as noted above, Queen, cited by the

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Examiner, notes the machinist's tools and, in Queen's applications, toolmaker's squares, are

distinguished by the fact that they are manufactured with extreme precision (Col.1, Ln.23-25).

Queen further teaches that, with respect to using a square to test a piece of work, "a lack of

squareness may be observed by the passage of light between the blade of the square and the

work at different points along the blade of the square" (Col.1, ln.30-33). The machinist uses

squares and straight edges to test flatness and squareness. If accuracy for flatness is being

tested, the machinist slides the blade, as referred to by Queen, across the surface of the piece to

be inspected. If squareness is to be tested, a right angle device is applied to the workpiece. One

right angle member passes in one plane along the object to be tested while the blade passes along

the edge of the face being inspected. As the blade slides across the piece, light can be observed

to illustrate flaws. This is old art and discussed in applicant's Background of Invention.

Applicant's preamble puts the claim in this context of testing the accuracy of a surface by

passing a machinist's tool (a tool with a flat or a blade edge) along the surface to be inspected.

In the present application, illuminating flaws or defects is discussed with respect to

identifying both location and severity (See for example p.1, ln.17-19). Applicant has amended

claims 12 and 17 to state that the light from the cavity identifies "flaws in flatness of a surface."

The Examiner has argued in the Office Action that applicant has relied on features which are not

recited in the rejected claims, specifically noting "locating flaws in a single planar surface." This

amendment carries the preamble assertion related to accuracy into the body of the claim. The

earlier language "accuracy" could relate to more than identifying flaws in flatness of a surface.

but certainly includes identifying flaws in flatness of a surface. While applicant disagrees with

the statement that applicant's claims failed to include this feature, the claims now clearly and

explicitly do include these limitations in both the preamble and the body.

The preamble further addresses tools for use by a machinist to identify flaws in the

flatness of a surface or testing the accuracy of a workpiece. To a machinist, such a tool might be

a straight edge or a square. Claim 12 is directed or drafted to be inclusive of any tool, whether a

straight edge or a square or other device which has a substantially flat elongated member with a

thin, straight edge to be abutted against the workpiece to be tested. This is the structural

limitation of the claim. It is a structural limitation to be understood in terms of a machinist's

knowledge of a flat elongated member having a thin straight edge for abutment with a

workpiece. Whether the tool is a straight edge by name or a square by name, it employs a blade

(Queen) or a substantially flat elongated member (applicant) with a straight edge. Claim 15

specifically defines the tool of claim 12 as a machinist's straight edge, a claim made possible

because applicant's drawings illustrate a machinist's straight edge. Claim 16 defines the tool of

claim 12 as a machinist's square, a claim made possible because applicant's drawings illustrate a

machinist's square. In any event, all of these devices have a straight edge consistent with the

dictionary language and with Queen's acknowledgment that machinist's tools are highly

accurate, or of extreme precision.

The preamble language is part of the claim construction, and the preamble language.

particularly the language noted by the Examiner, is also in the body of the claims.

C. Intended Use

The Examiner argues, citing Ex parte Masham, 2 USPO2d 1647 (1987), that "recitation"

with respect to the manner in which a claimed apparatus is intended to be employed does not

differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural

limitations. The Examiner specifically refers in this regard to the language "for abutment with

the workpiece to be tested" and "for conducting light emitted from said source."

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The language "for abutment with the workpiece to be tested" is incidentally descriptive

of how the invention works. However, it is a structural limitation. As noted above, the "edge" is

the narrow surface of the substantially flat elongated member. Whatever the structural contour

of the remainder of the device, the structure must be such that there is no obstruction to the

abutment of the edge with the workpiece. This language adds structural information to the

claim.

Similarly, the language "for conducting light emitted from said source, is incidentally

descriptive but also defines the passages between the light source and the cavity. The passages

cannot be configured in a way to obstruct light from passing from the source to the cavity.

Considering the composite of these requirements in claim 1, applicant's claimed device

has an edge which is the narrow surface of a flat elongated member with a cavity in the edge

which will abut the workpiece and the flat elongated member has a plurality of passages which

conduct light from the source to the cavity in the edge or narrow surface. Bahar has no such

plurality of passages, has no substantially flat elongated member, has no flat elongated member

in which passages extend and has no flat elongated member with an edge with a cavity into

which light is passed from passages. This language is not merely a statement of intended use. It

is a structural definition which does differentiate the claimed apparatus from the cited prior art.

D. "Whereby" Clauses

The Examiner argues, citing In re Mason, 114 USPO 127, 44 CCPA 937 (1957), that

"whereby" language "does not define structure and accordingly cannot serve to distinguish." In

applicant's claims, the earlier "whereby" clause indicates that "defects in accuracy are

illuminated from within said edge to a machinist" and as amended, now require that flaws in the

flatness of the surface of the workpiece are illuminated from within said edge and visible to a

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machinist." The clause is structurally related to the "substantially flat" requirement of the claims. That is, applicant's member is, as defined, substantially flat and the straight edge of this flat member (the narrow surface) is, according to the claims, structurally positioned for abutment with the workpiece to be tested. Furthermore, the member must be "substantially flat" so as to allow the flaws in the flatness of the surface of the workpiece to be illuminated to the vision of the machinist. Bahar does not do this because Bahar is not structurally substantially flat. Bahar is thick, (as thick as its back sides 13 and 15 or the distance between the sidewalls 14 and 16). The thick box of Bahar is not structurally capable, nor is it intended, to identify flaws in a flat surface. Bahar doesn't even care if the structure is straight, indicating it would be acceptable to use any shape (Col.2, Ln.57-61). In fact, Bahar is designed based on the assumption that a flat surface exists. Bahar says that "the invention relates more particularly to the laying of floor tiles of the type which has a flat upper surface" (Col.1, Ln.7-8.) and that "the box may be made more useful for installing a flat surface by the addition of one or more levels such as levels 30 and 31 shown in Fig.4" (Col.2, Ln.28-30). Thus, Bahar fails to even recognize the problem that applicant's invention solves. The concept of Bahar is that a box which has rigid X and Y axis edges can be used to determine whether or not two pieces are presumed or known to be flat are level because the planar X and Y axis edges can be used to conform to the planes of the presumably flat objects. Bahar can not indicate whether the area inside or outside of the box really is flat and, if Bahar is moved across the surface and an aberration is contacted, the entire planar perimeter of the box is impacted so that light will pass in a way not to identify the location of the flaw. On the contrary, applicant's device is not intended to locate the planes of different objects which are presumed to be flat. Applicant's device is intended to determine whether or not an object is flat to begin with and, if not, the exact location and severity of the aberrations.

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Applicant's invention, as claimed, is capable of performing this function. It is capable of doing this because of the structural limitations of the claim. Bahar's tool is not capable of doing what applicant's tool does nor is applicant's tool capable of doing what Bahar's does.

Therefore, applicant respectfully requests allowance of all claims pending in this application.

It is understood there is no fee due at this time. However, should a fee deficiency have occurred, please charge Deposit Account No. 50-1971 per 37 C.F.R. § 1.25.

Respectfully submitted,

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